## 5. AVAILABLE SOLUTIONS PLUSES & MINUSES 'Automation in irrigation. xplore AS, differentiate · Alarmnsystem to give alert while animals attacks the crops. PR 9. PROBLEM ROOT / CAUSE 7. BEHAVIOR + ITS INTENSITY 2. PROBLEMS / PAINS + ITS FREQUENCY Due to in sufficient labourforces. Cropsarenotirrigatedproperly. •Asks suggestions from surrounding Due to various environmental factors peoples and implement there cent Improper maintenance of crops. technologies. such as temperature · Lack of knowledge among farmers · Consumes more time in cropland. climate, to pography and soil quality inusage offertilizers and hence · Searching for an alternative solution for which results incrop crops are affected. destruction. anexisting solution. Due to high ammonia,urea, Requires protecting crops from Wild potassium and animals attacks, birds and pests. highPHlevelfertilizers. SL CH 3. TRIGGERS TO ACT TR 10. YOUR SOLUTION 8. CHANNELS of BEHAVIOR ONLINE Usingdifferentplatforms/socialmedia Moisture sensor interfaced with Arduino Microcontroller to By seeing surrounding cropland with Extract online & offline CH of BE to describe th eworking and uses of measure the moisture level in soil and relay isused toturn installing machineries. ON and OFF the motorpump for managing the excess water Hearing aboutinnovativetechnologies It will be updated to authorities through IOT. smart crop protection device. andeffective solutions. Temperature sensor connected to microcontroller is used to monitor the temperature inthe field. The optimum EM OFFLINE 4. EMOTIONS BEFORE / AFTER temperature required for crop cultivation is maintained using IOT basedfertilizingmethodsare followed, to minimize the Giving awarenes among farmers Mentalfrustrations due to insufficient negative effects on growth of crops while using fertilizers production of crops. about the application of the device. · Felt smart enough to follow the available Image processing techniques with IOT is followed forcrop

protection agains animalattacks.

technologies with minimum cost.